AMENDMENT IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for preparing coated crystals comprising the steps:

a. providing a dispersion of bio-crystal ~~crystal~~ template particles in a solvent and

b. coating said particles with a multilayer comprising alternating layers of oppositely charged polyelectrolytes and/or nanoparticles.

2. (Canceled)

3. (Currently Amended) The process of claim 1 ~~or 2~~, wherein said bio-crystal ~~crystal~~ particles are protein crystals, peptide crystals, nucleic acid crystals, lipid based crystals, carbohydrate crystals or crystals from low ~~law~~ molecular weight materials.

4. (Original) The process of claim 3, wherein said protein crystals are selected from antibody crystals, enzyme crystals, virus capsid protein crystals, S-layer protein crystals, glycoprotein crystals, receptor protein crystals and cytostolic protein crystals.

5. (Currently Amended) The process of claim 1, wherein said bio-crystal ~~crystal~~ template particles are selected from the group consisting of crystalline bio-material, crystalline organic material, crystalline inorganic material or mixtures thereof.

6. (Original) The process of claim 5, wherein the crystalline or organic material is selected from crystalline drugs, crystalline vitamins, crystalline nutrients, crystalline hormones, crystalline growth factors, crystalline pesticides and crystalline antibiotics.

7. (Currently Amended) The process of claim 1, wherein the bio-crystal ~~crystal~~ template is a single crystal materials or an amorphous crystal material.

8. (Currently Amended) The process of claim 1, wherein said bio-crystal template particles have an average diameter of 500 μm or less.

9. (Currently Amended) The process of claim 8, wherein said bio-crystal template particles have an average diameter of 50 μm or less.

10. (Previously amended) The process of claim 1, wherein said polyelectrolytes are linear models.

11. (Previously amended) The process of claim 1, wherein said polyelectrolytes are selected from inorganic, organic and biological polyelectrolytes and mixtures thereof.

12. (Original) The process of claim 10, wherein the organic polyelectrolyte is a polymer selected from biodegradeable polymers, fluorescently labeled polymers, conducting polymers, liquid crystal polymers, photoconducting polymers, photochromic polymers, and copolymers and/or mixtures thereof.

13. (Original) The process of claim 10, wherein the biological polyelectrolyte is a polymer selected from polyamino acids, polycarbohydrates, polynucleotides and modified biopolymers.

14. (Original) The process of claim 10, wherein the inorganic polyelectrolyte is a polymer based on polysilanes, polysilanoles, polyphosphazanes, polysulfazenes, polysulfides and polyphosphates.

15. (Previously amended) The process of claim 1, wherein said nanoparticles have an average diameter of from 1 to 100 nm.

16. (Previously amended) The process of claim 1, wherein said nanoparticles are selected from inorganic, organic and biological particles or mixtures thereof.

17. (Original) The process of claim 16, wherein said nanoparticles are selected from particles which provide targeting properties.

18. (Currently Amended) The process of claim 16 ~~or 17~~, wherein said nanoparticles are particles having magnetic properties.

19. (Currently Amended) The process of claim 16 ~~or 17~~, wherein said nanoparticles are immunoglobins or receptor ligands.

20. (Currently Amended) The process of any one of claims 16 to 19, 34, or 35, wherein the inorganic nanoparticles are ceramic particles, magnetic particles, magneto-optical particles, nitridic ceramic particles, carbidic ceramic particles, metallic particles, and/or sulfur or selenium-containing particles.

21. (Currently Amended) The process of any one of claims 16 to 19, 34, or 35, wherein the organic or biological nanoparticles are macromolecules and/or targeting molecules.

22. (Previously amended) The process of claim 1, wherein said solvent is selected from aqueous solvents, organic solvents and mixed aqueous/organic solvents.

23. (Currently Amended) The process of claim 1 further comprising the step:

c. at least partially solubilizing the encapsulated bio-crystal ~~crystal~~.

24. (Original) The process of claim 23, wherein said solubilization is carried out by adjustment of solvent, pH, temperature and/or salt conditions.

25. (Previously amended) The process of claim 1 further comprising the step:

d. rupturing the polyelectrolyte/nanoparticle shell.

26. (Currently Amended) The process of claim 1 further comprising the step:

e. at least partially disintegrating encapsulated bio-crystals ~~biomolecules~~.

27. (Currently Amended) Coated bio-crystal particle having a core which is a crystal template particle and a multiplayer shell comprising alternating layers of oppositely charged polyelectrolytes and/or nanoparticles.

28. (Currently Amended) Coated bio-crystal particle having a core comprising an at least partially solubilized crystal template particle and a multilayer ~~multiplayer~~ shell comprising alternating layers of oppositely charged nanoparticles and/or polyelectrolytes.

29. (Original) The particle of claim 27 or 28 having an average diameter of 50 μm or less.

30. (Currently amended) ~~Hollow~~ A hollow shell obtainable by disintegrating the template particle of the coated particle of claim 27~~,~~ or 28 ~~or 29~~.

31. (Currently amended) ~~Use~~ The use of the particle according to ~~any one of claims~~ claim 27 ~~to 29~~ or 28 as a system for targeted delivery and/or controlled release of crystallizable biomolecules.

32. (Previously presented) A hollow shell obtainable by disintegrating the template particle of the coated particle of claim 29.

33. (Previously presented) The use of the particle according to claim 29 as a system for targeted delivery and/or controlled release of crystallizable biomolecules.

34. (New) The process of claim 17, wherein said nanoparticles are particles having magnetic properties.

35. (New) The process of claim 17, wherein said nanoparticles are immunoglobins or receptor ligands.